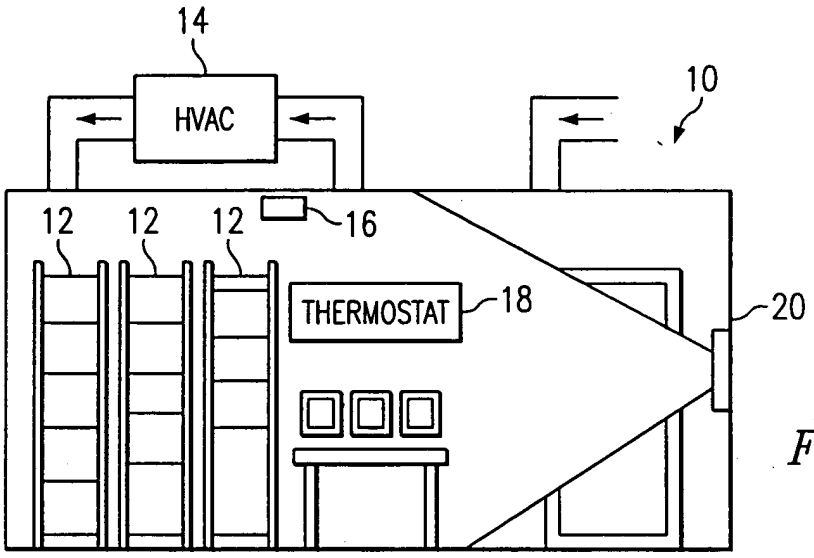


FIG. 1

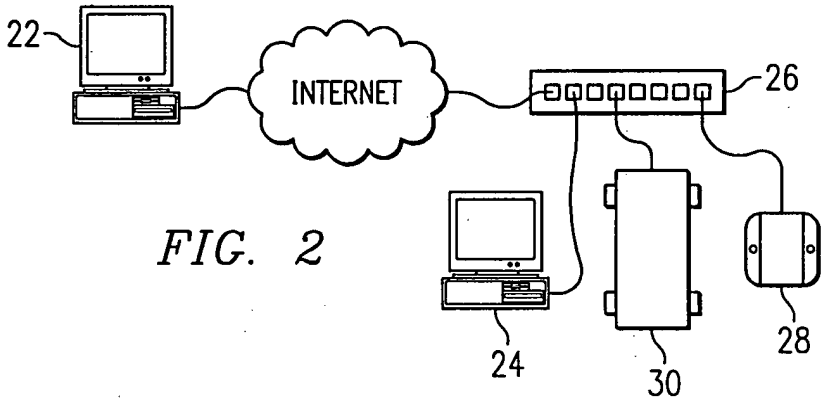


FIG. 2

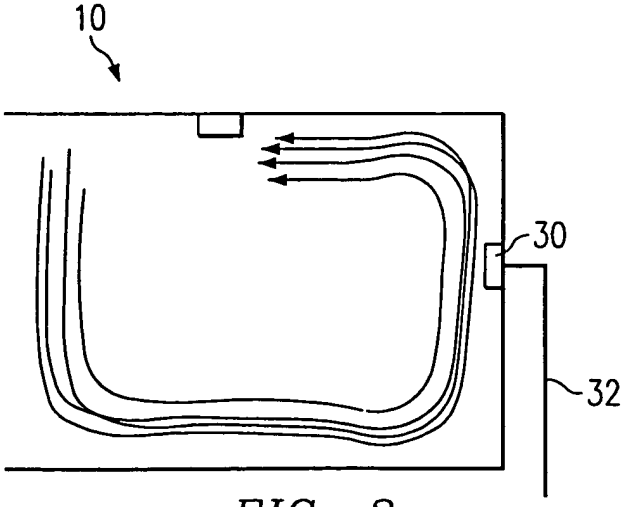


FIG. 3

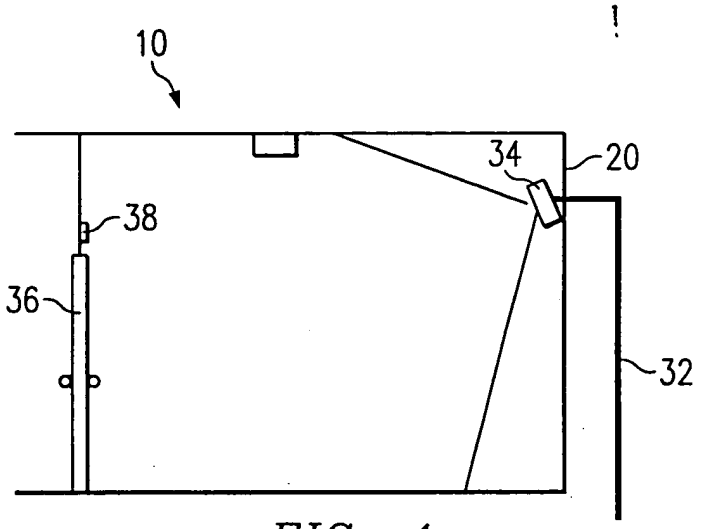


FIG. 4

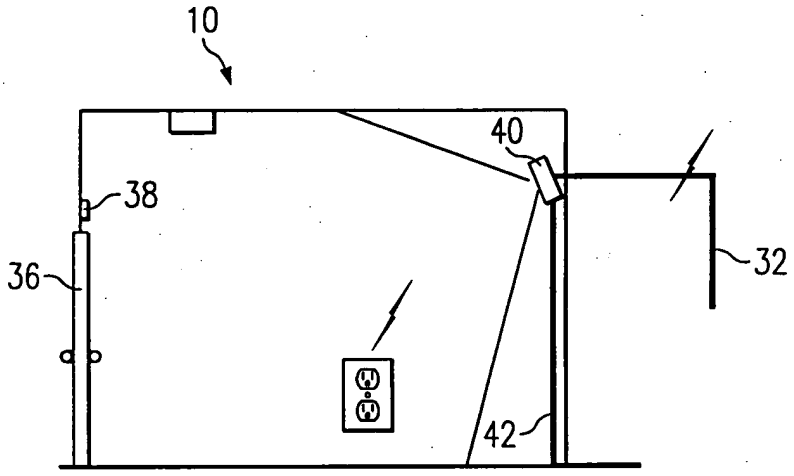


FIG. 5

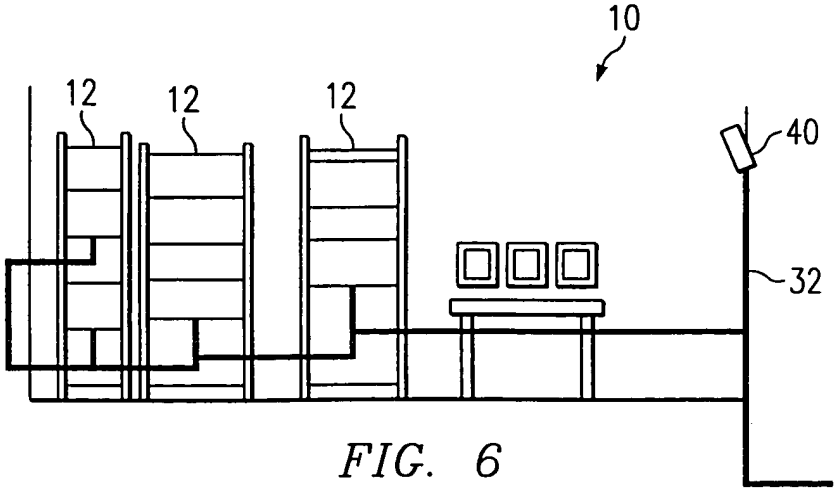


FIG. 6

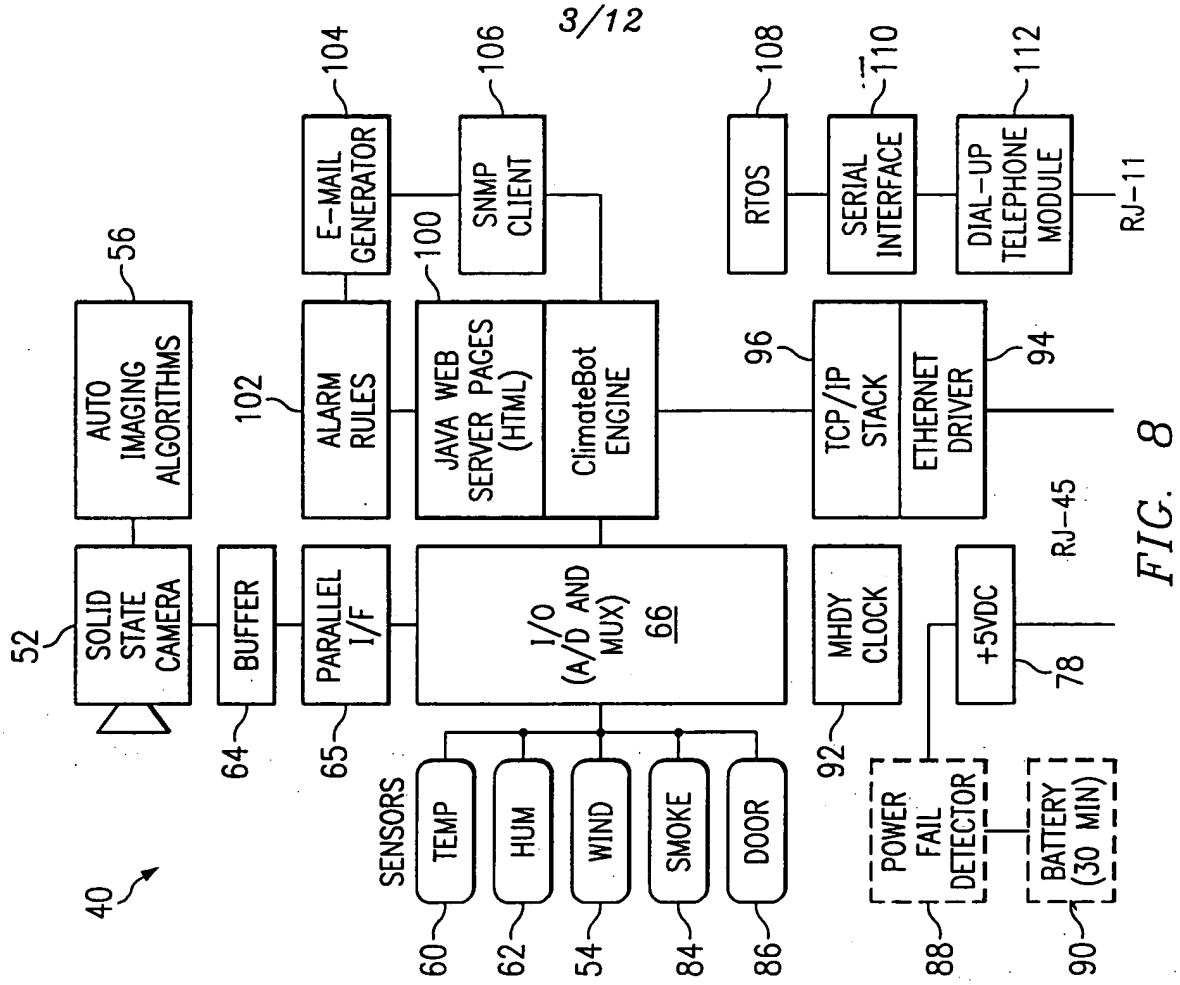

40
52
SOLID STATE CAMERA
BUFFER
64
PARALLEL I/F
65
I/O (A/D AND MUX) 66
SENSORS
TEMP
HUM
WIND
SMOKE
DOOR
60
62
54
84
86
MHDY CLOCK
92
POWER FAIL DETECTOR
88
+5VDC
78
BATTERY (30 MIN)
90
RJ-45
AUTO IMAGING ALGORITHMS
56
ALARM RULES
102
JAVA WEB SERVER PAGES (HTML)
100
ClimateBot ENGINE
E-MAIL GENERATOR
104
SNMP CLIENT
106
TCP/IP STACK
96
ETHERNET DRIVER
94
RTOS
108
SERIAL INTERFACE
110
DIAL-UP TELEPHONE MODULE
112
RJ-11

FIG. 8

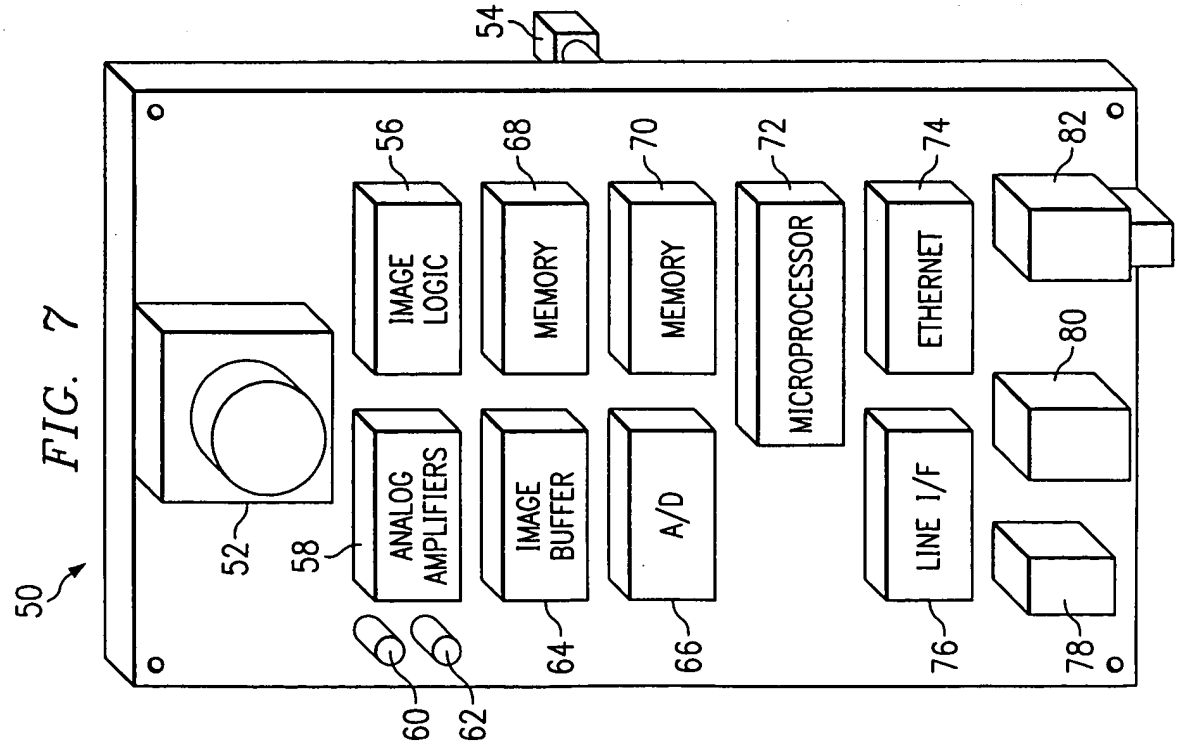

50
52
54
58
ANALOG AMPLIFIERS
IMAGE LOGIC
56
IMAGE BUFFER
64
MEMORY
68
A/D
66
MEMORY
70
MICROPROCESSOR
72
LINE I/F
76
ETHERNET
74
80
78
82
60
62

FIG. 7

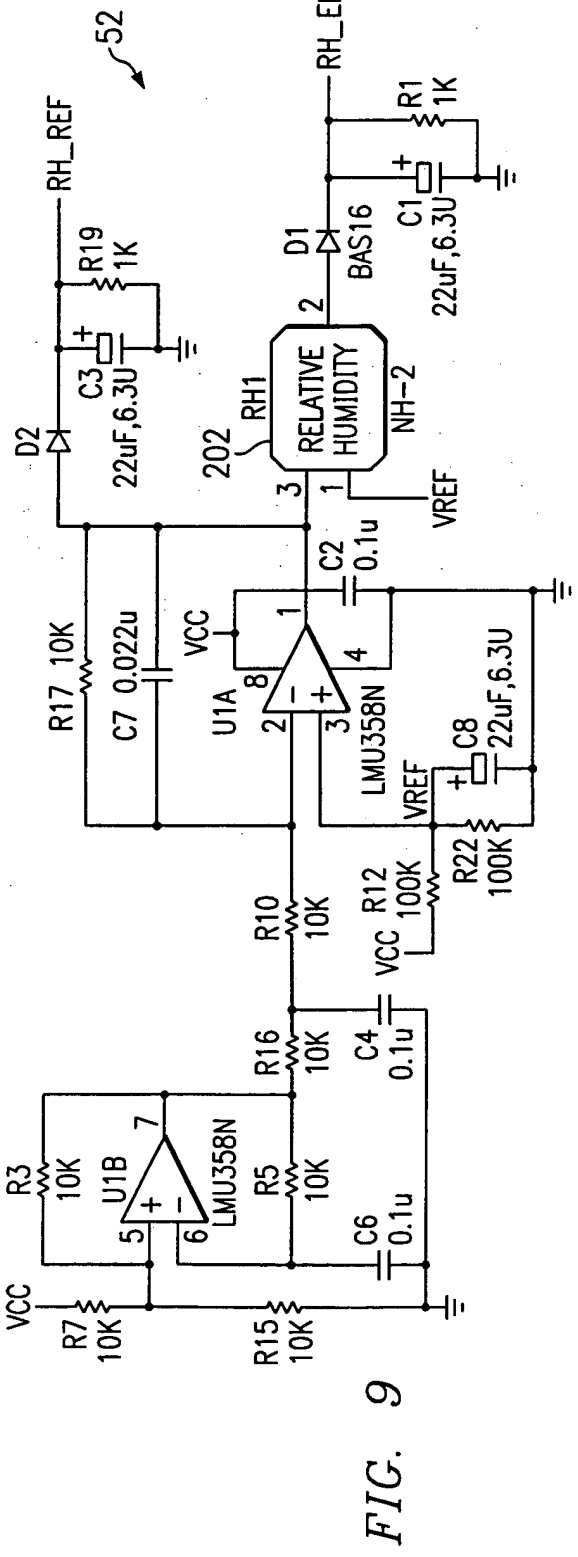

52
RH_REF
RH_ENU
R19 1K
R1 1K
C3 22uF,6.3U
C1 22uF,6.3U
D1 BAS16
D2
202
RH1
RELATIVE HUMIDITY
NH-2
VREF
C2 0.1u
R17 10K
C7 0.022u
VCC
U1A
LMU358N
C8 22uF,6.3U
R22 100K
R12 100K
R10 10K
R16 10K
C4 0.1u
R3 10K
U1B
R5 10K
C6 0.1u
R7 10K
R15 10K

FIG. 9

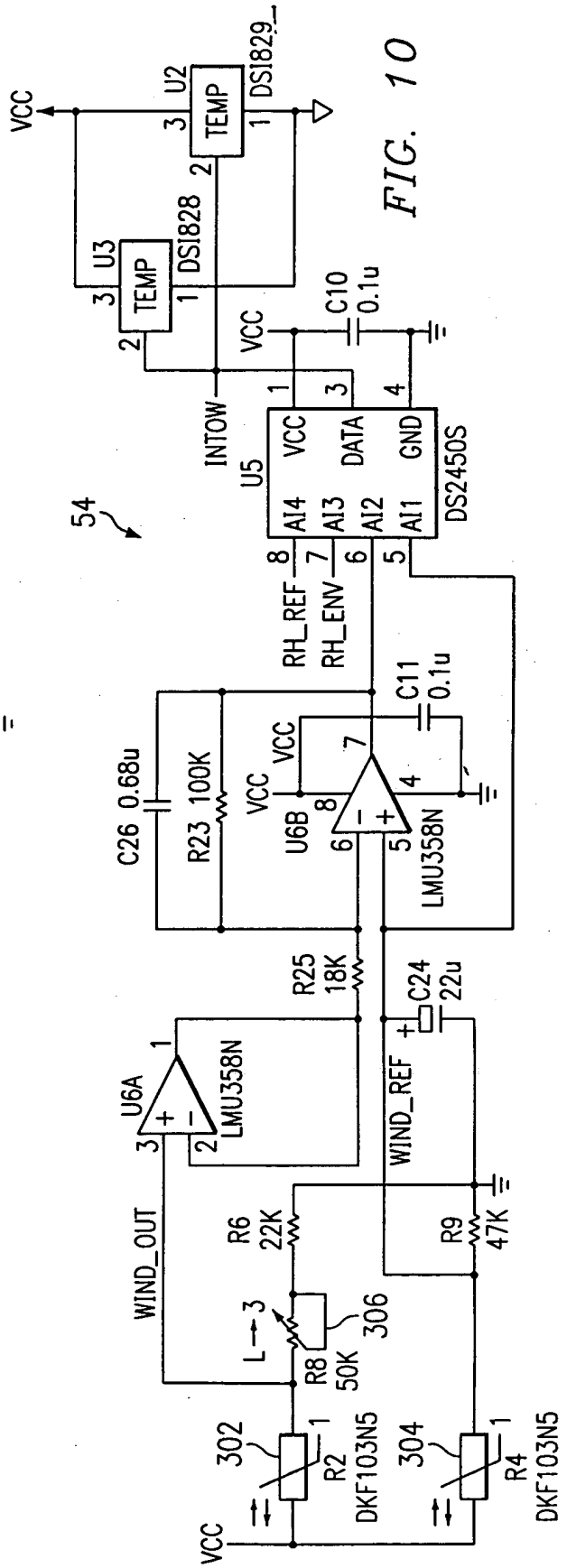

VCC
U2 DSI829
TEMP
U3 DSI828
C10 0.1u
INTOW
U5 DS2450S
VCC DATA GND
AI4 AI3 AI2 AI1
54
RH_REF
RH_ENV
C11 0.1u
C26 0.68u
R23 100K
U6B
LMU358N
R25 18K
C24 22u
U6A
WIND_REF
WIND_OUT
R6 22K
R9 47K
L-3
R8 50K
306
302
304
R2 DKF103N5
R4 DKF103N5

FIG. 10

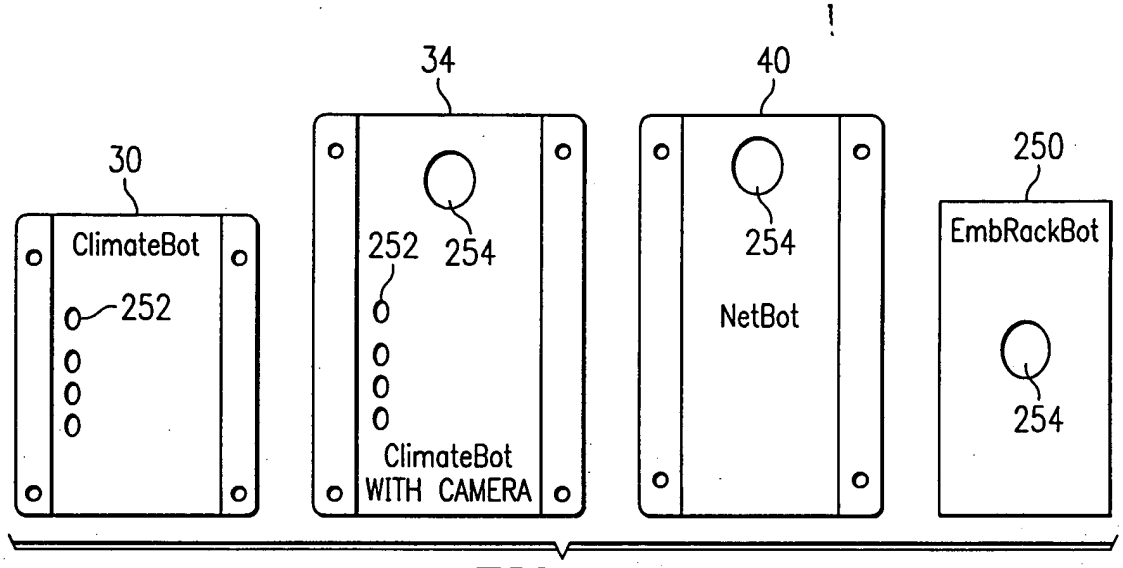


FIG. 11

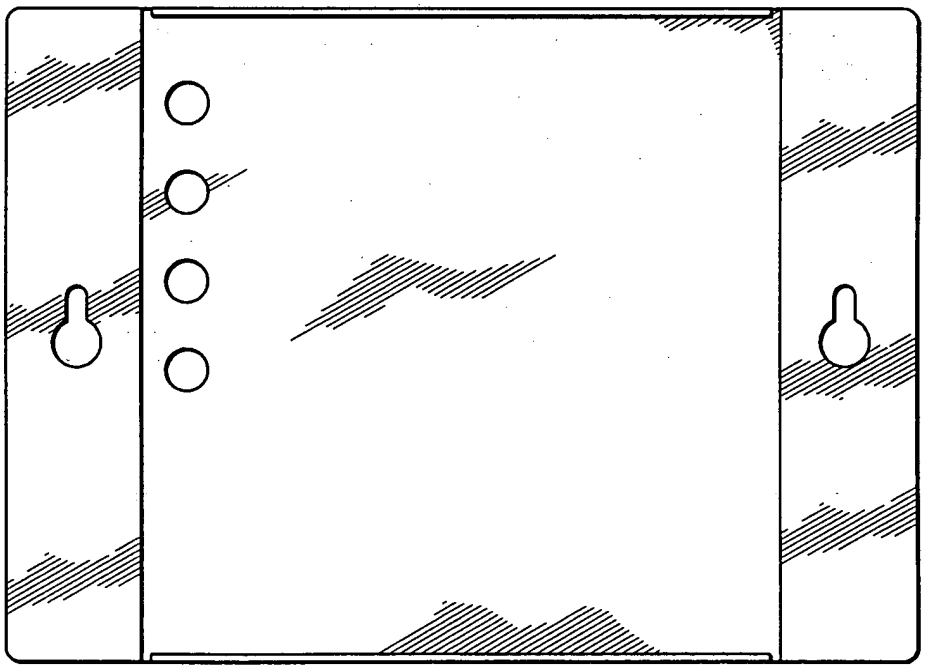


FIG. 12A

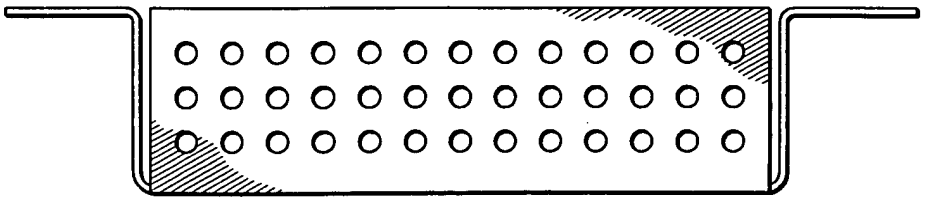


FIG. 12B

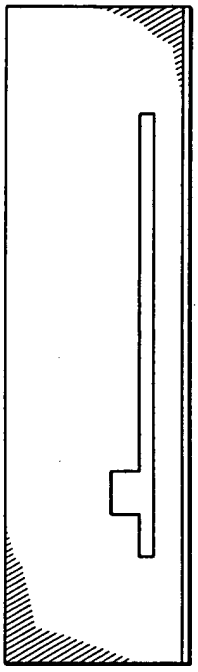


FIG. 12C

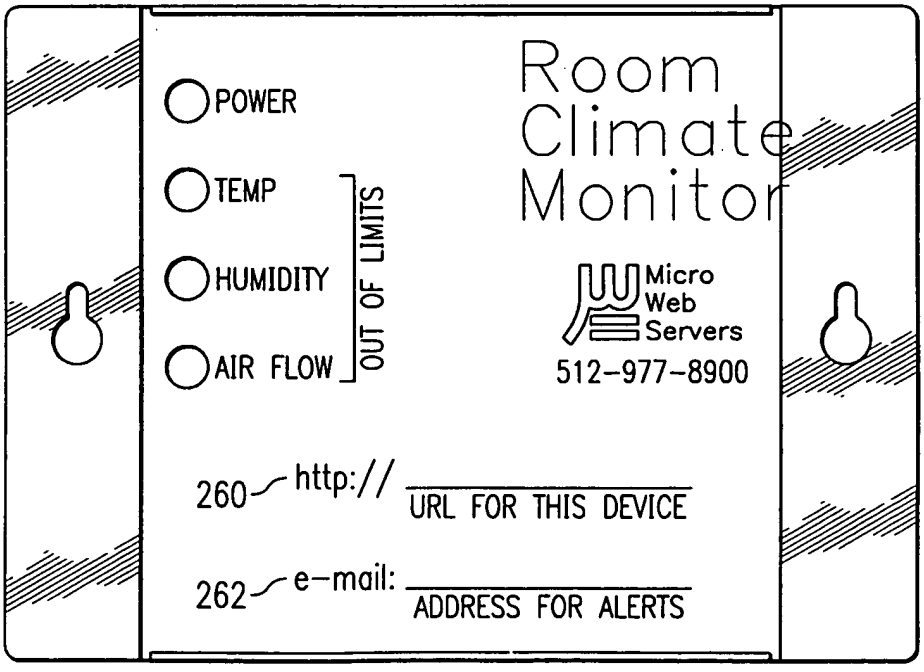


FIG. 12D

FIG. 13A

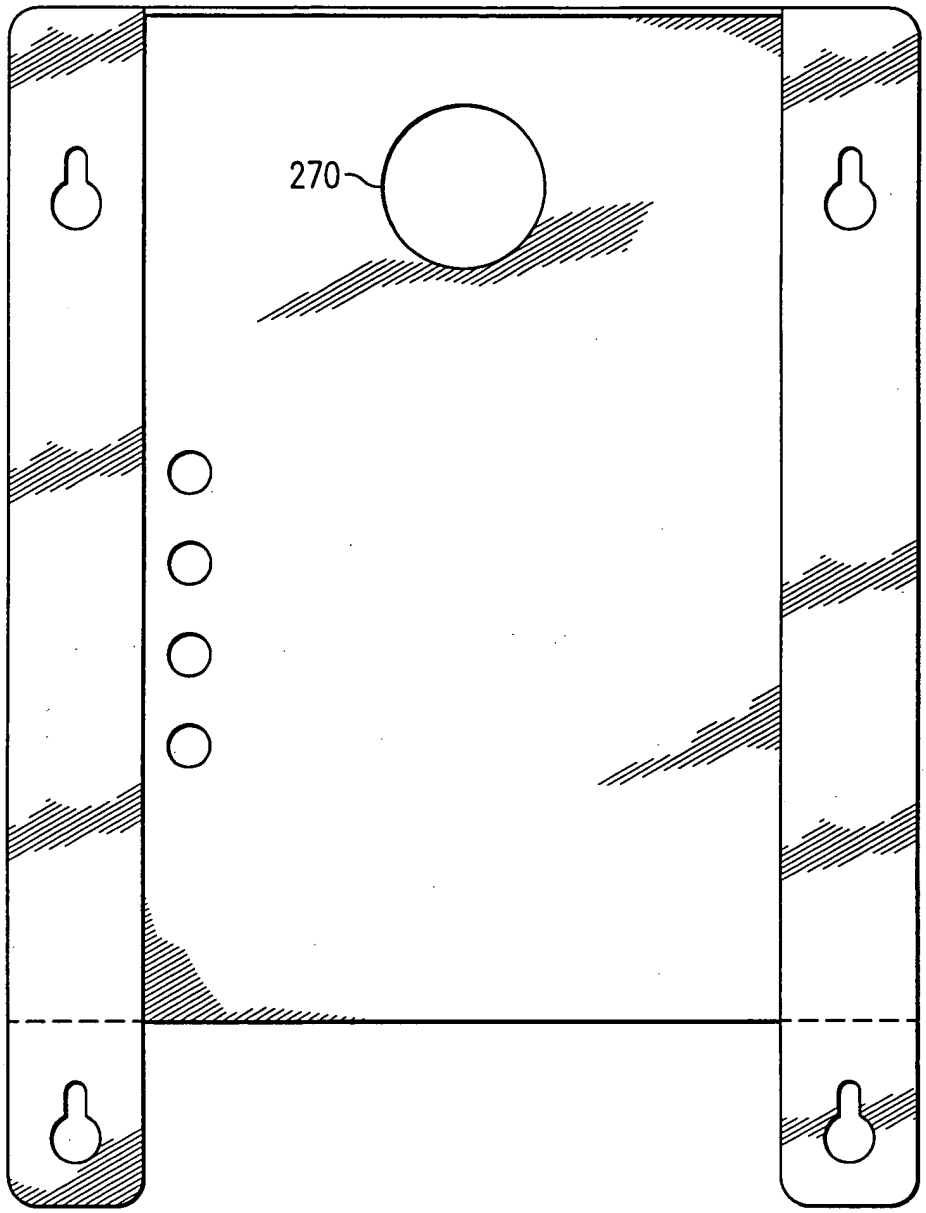


FIG. 13C

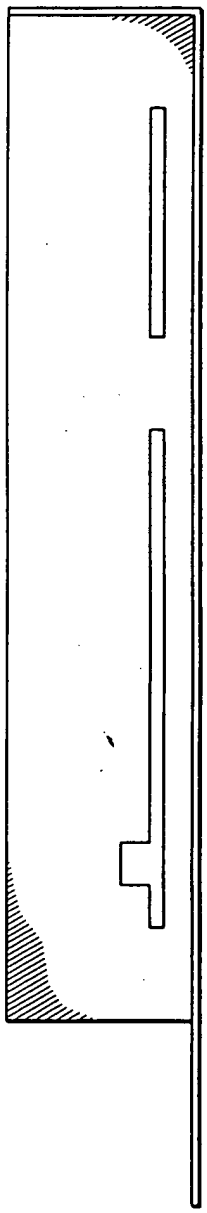
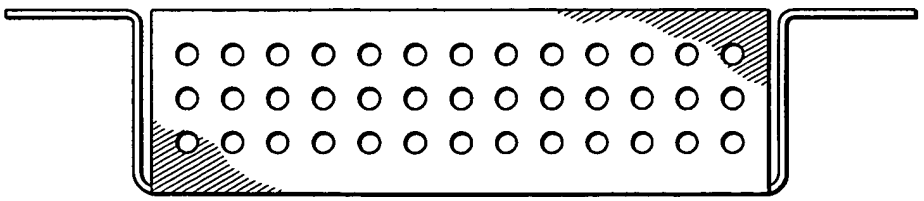


FIG. 13B



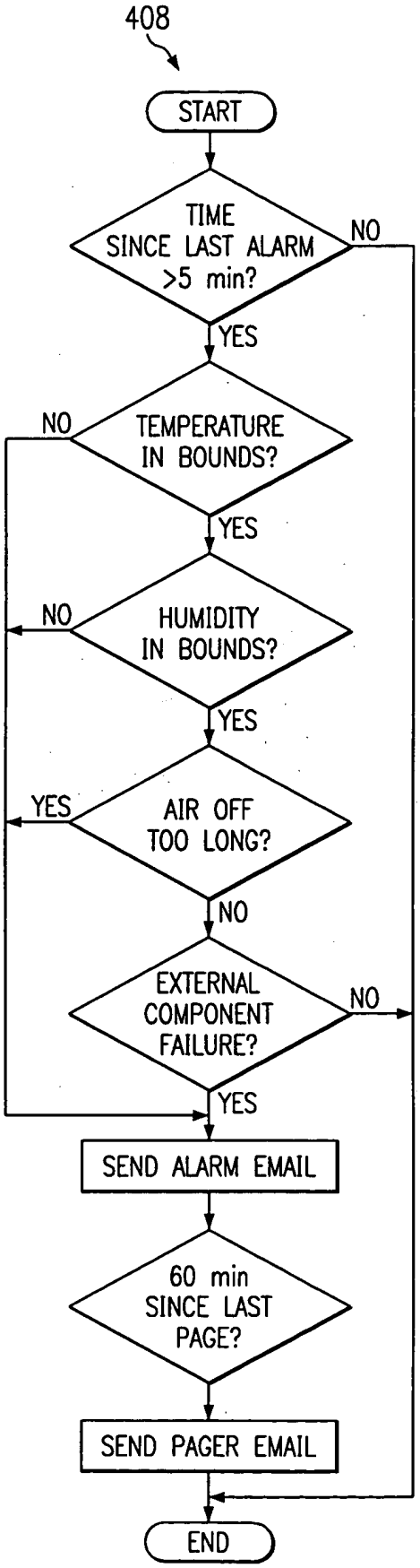


FIG. 14A

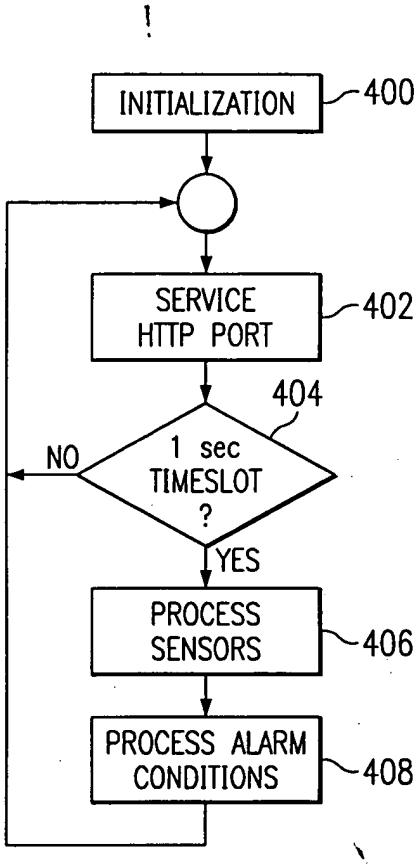


FIG. 14

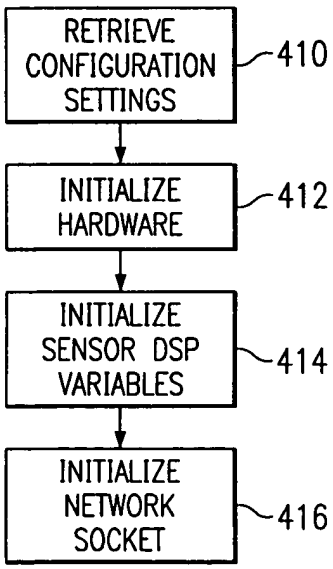


FIG. 15

FIG. 16

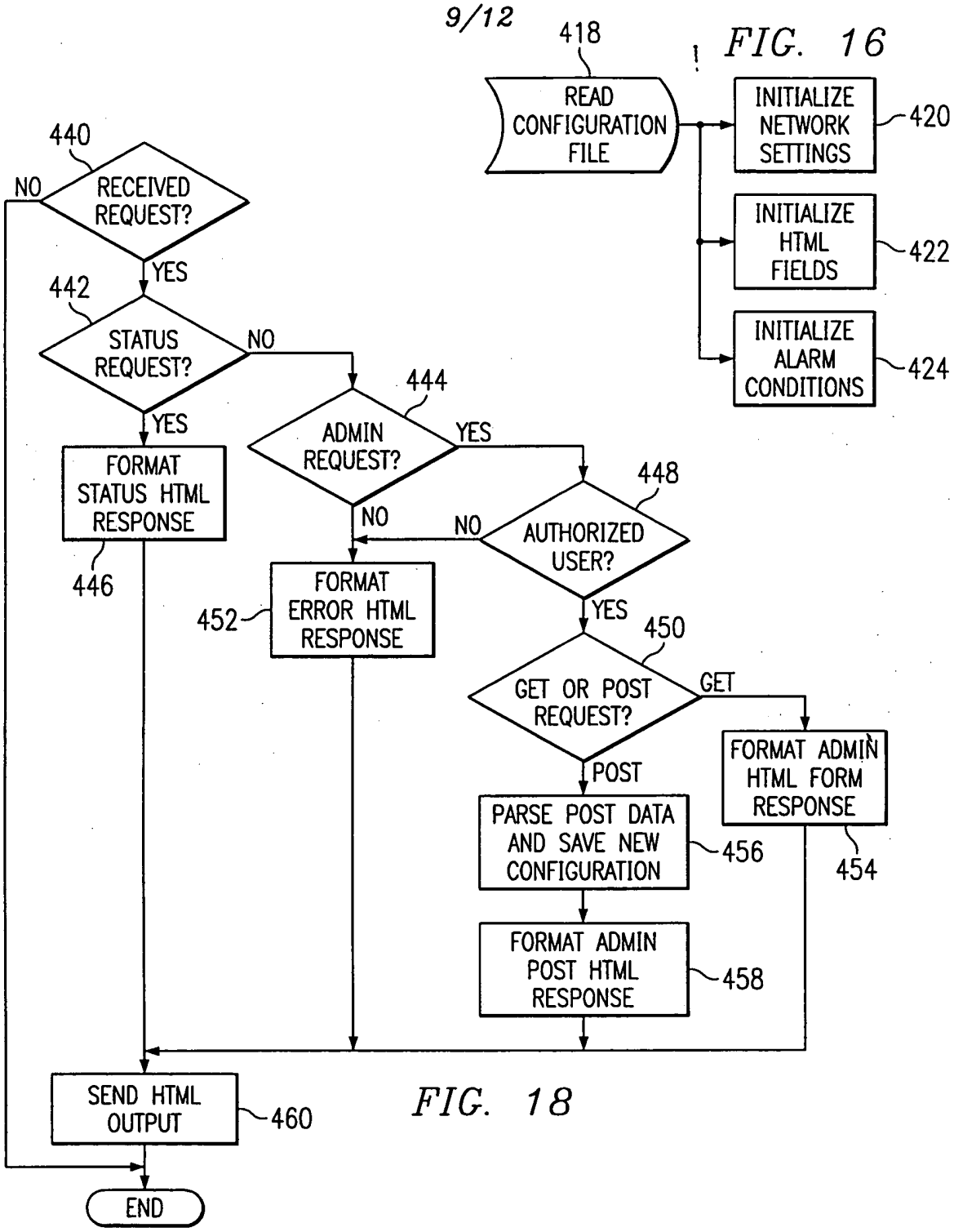


FIG. 18

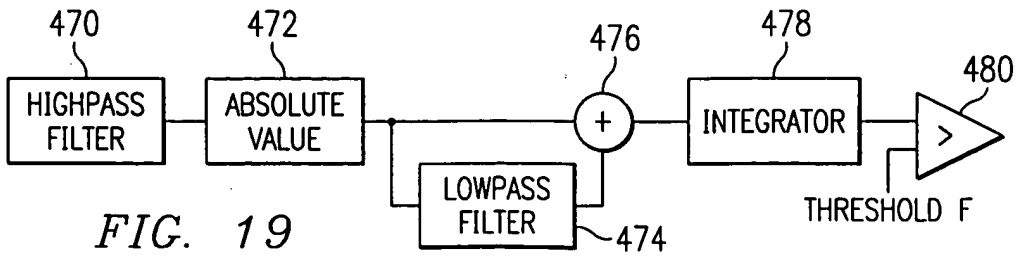


FIG. 19

NetBotz CoreTex –

URL: http://www.coretex.com/~thompson

Date, time:	7/22/99 08:00
Temp (C):	22.1
Temp (F)	72.6
Humidity (%)	55
Air Flow (0–100)	6
Smoke Alarm Sound	Off

Limit Settings	High	Low
Temperature (C)	23	15
Humidity (%)	75	35
Air Flow (0–100)	1	90
Smoke Alarm	On	On

Equipment report (launched Bot returns):

Server "High Plains" Compaq	Status	Alarms?	Limit High	Limit Low
CPU Temp F	77		120	50
CPU Fan	1200		1400	1200
Disk Status	On		Off	Off
Router "Franks Favorite" 41B				
Temp	85		90	110
Data Lines Up?	On			Off
Server "High Plains" Compaq				
CPU Temp	80		120	50
CPU Fan	1300		1400	1200
Disk Status	On		Off	Off
UnPowerSup "Big Bertha" ACX 500				
On-line?	True		False	False
Charge capacity (%)	95	Yes	100	99
Server "Old Guy" Dell 4000				
CPU Temp	90		120	50
Disk Status	On		Off	Off

Destinations for Alarm e-mail and paging

E-Mail	
Primary:	itstaff@coretex.com; gerryc@flash.net
Secondary:	jnorton@flash.net
Paging:	5127896565@mail.att.net

FIG. 17

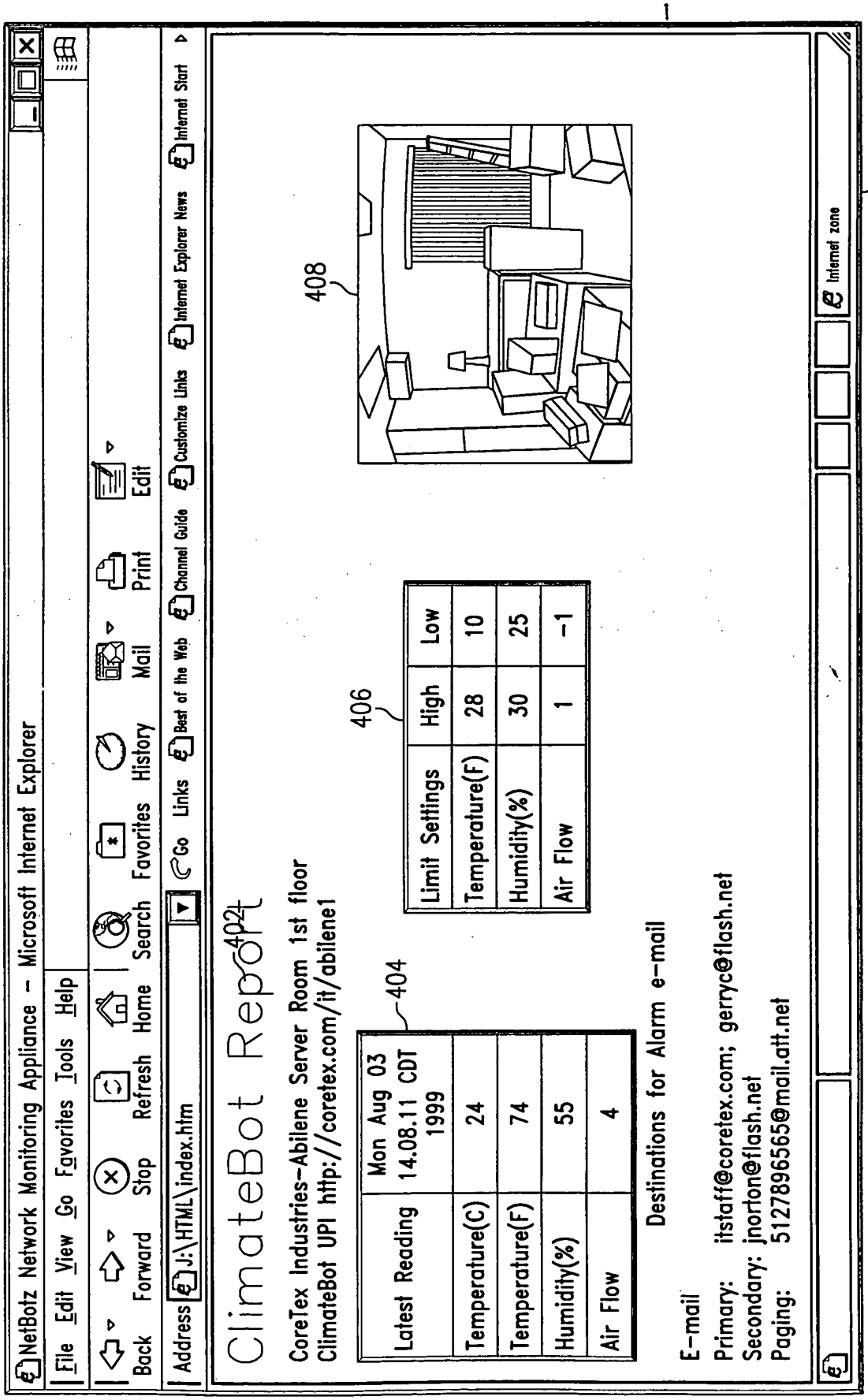

1
NetBotz Network Monitoring Appliance - Microsoft Internet Explorer
File Edit View Go Favorites Tools Help
Back Forward Stop Refresh Home Search Favorites History Mail Print Edit
Address J:\HTML\index.htm
Go Links Best of the Web Channel Guide Customize Links Internet Explorer News Internet Start
ClimateBot Report
402
CoreTex Industries-Abilene Server Room 1st floor
ClimateBot UPI http://coretex.com/it/abilene1
404
406
408
Latest Reading
Mon Aug 03 14.08.11 CDT 1999
Temperature(C) 24
Temperature(F) 74
Humidity(%) 55
Air Flow 4
Limit Settings High Low
Temperature(F) 28 10
Humidity(%) 30 25
Air Flow 1 -1
Destinations for Alarm e-mail
E-mail
Primary: itstaff@coretex.com; gerryc@flash.net
Secondary: jnorton@flash.net
Paging: 5127896565@mail.att.net
Internet zone
400

FIG. 20

Typical Scheduled E-mail Report

From: Abilene Server Room [SMTP:abilene@coretex.net]
Sent: Friday, July 09, 1999 08:00 AM
To: itstaff@coretex.com; hjones@flash.net
Subject: ClimateBot Report: Abilene Room Conditions

Temperature: 18C (64F)
Humidity: 55%
Air Flow: 50
Condition: within limits

Current Limit settings:
Temp (C) high: 20 Temp low: 15
Humidity high: 60 Humidity low: 40
Air flow high: 08 Air flow low: 00

To change limits and reporting go to: http://coretex.com/it/abilene1

FIG. 21A

Alarm Message (Typical)

From: Abilene Server Room [SMTP:abilene@coretex.net]
Sent: Friday, July 09, 1999 10:30 AM
To: itstaff@coretex.com; hjones@flash.net
Subject: Abilene Room Conditions

Temperature: 25C (75F) Above limits
Humidity: 55%
Air Flow: 50
Condition: Over temperature alarm

To change limits and reporting go to: http://coretex.com/it/abilene1

FIG. 21B

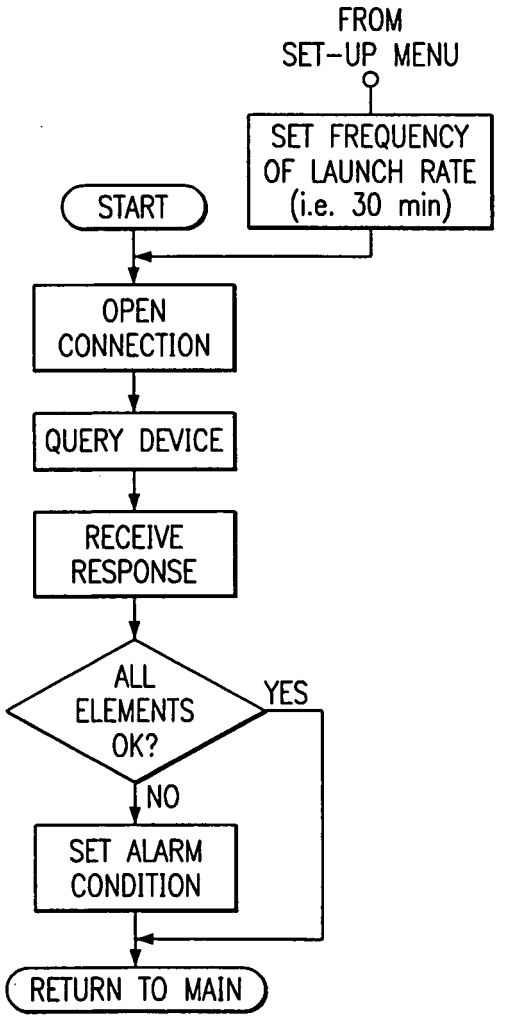


FIG. 22

Applicants: John J. Fo et al. Docket No.: 13048:14 Filing Date: October 27, Serial No.: 09/429,50 Examiner: Jason Cardone Title: Method and System for M. Group Art Unit: 2152 ring Computer Networks and Equipment